

EX: $\{(1,2)(1,3)(2,2)(2,3)\}$

any set of ordered pair
* for each x-value there
maybe many y values

EX: $\{(1,2)(1,3)(2,2)(2,3)\}$
Domain

- all x coordinates
(input) | Domain
 $\{1,2\}$

EX: $\{(1,2)(1,3)(2,2)(2,3)\}$
Range

- all y coordinates
(output) | Range
 $\{2,3\}$

Are these functions?
EX: $\{(1,2)(1,3)(1,4)(1,5)\}$

Function - a relation in which
each input (domain) is paired
w/ exactly one output (range).
according to the rule

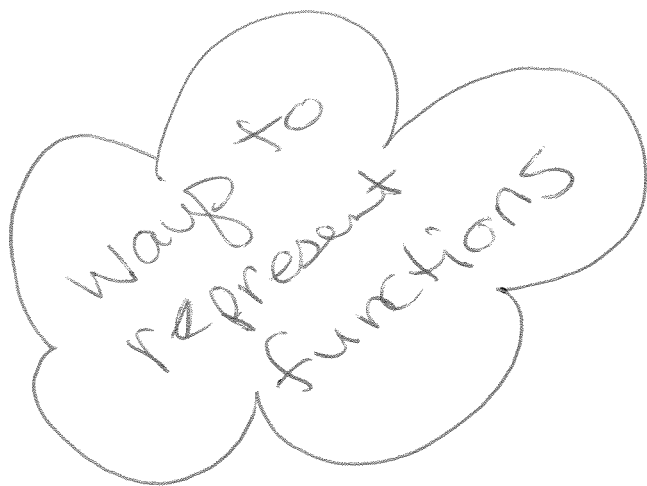
EX: $\{(2,2)(3,2)(4,1)(5,1)\}$

- each x has only 1 y
- the range can repeat, but the domain can not
- all functions are relations but all relations are not functions
- Vertical line test!

EX: $y = 2x + 4$

2 times a number increased
by 4 will equal y.

rules can be ① an equation
② a word sentence



words

rule

Table

graph